



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/721,871	11/24/2000	Kenneth B. Higgins	5113	4059

7590 01/08/2003
Terry T. Moyer
P.O. Box 1927
Spartanburg, SC 29304

EXAMINER

JUSKA, CHERYL ANN

ART UNIT	PAPER NUMBER
----------	--------------

1771

DATE MAILED: 01/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/721,871

Examiner

Cheryl Juska

Applicant(s)

HIGGINS ET AL.

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-149 is/are pending in the application.
- 4a) Of the above claim(s) 52-55, 86-116, 119-122, 127, 131, 134, 135, 143 and 144 is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 1-51, 56-85, 117, 118, 123-126, 128-130, 132, 133, 136-142 and 145-149 is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3 & 9-12 .

- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

U.S. Patent and Trademark Office
PTO-326 (Rev. 04-01)

Office Action Summary

Part of Paper No. 15

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Group I, claims 1-51, 56-85, 117, 118, 123-126, 128-130, 132, 133, 136-142, and 145-149, in Paper No. 14 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. The Examiner agrees with Applicant that claim 103 was erroneously placed in Group I, rather than in the proper group, Group IV. As such, claims 52-55, 86-116, 119-122, 127, 131, 134, 135, 143, and 144 are withdrawn as being non-elected.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 1 and 41 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Claims 1 and 41 are indefinite for the use of the phrase "such as." Said phrase renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 2, 4-7, 14, 16-35, 38-50, 56-60, 62-67, 69-73, 75-80, 117, 123-126, 128-130, 132, 133, 136-142, and 145-149 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,522,857 issued to HIGGINS in view of 5,610,207 issued to DE SIMONE et al.

HIGGINS teaches a carpet or carpet tile comprising a tufted or bonded primary carpet, an adhesive layer having a reinforcing layer embedded therein, and a polyurethane foam cushion backing (col. 1, lines 5-7 and lines 26-33 and col. 2, lines 1-6). The primary carpet backing may also have a pre-coat latex, urethane, PVC, or acrylic (i.e., hot melt adhesive) layer (col. 1, lines 44-47). The adhesive layer may be a polyolefin or other thermoplastic material and is present in an amount ranging from 10-70 oz/yd² (col. 1, lines 48-52). The reinforcing layer may be a fiberglass scrim or a woven or nonwoven material made of polyester, nylon, or polypropylene (col. 1, lines 52-55). The foam layer may be 2.54-25.4 mm thick with a density of about 10-60 oz/yd² (col. 2, lines 1-6).

Thus, HIGGINS teaches the present invention with the exception that the foam layer is a rebond foam layer. However, rebond foam carpet backings are known in the art as is evidenced by DE SIMONE. DE SIMONE teaches a rebond polyurethane foam product which is suited for a carpet backing (abstract and col. 2, lines 34-45). The rebond foam is made from recycled scrap or waste polyurethane foam which is reduced to particles of 0.5 to 5 mm in size (col. 2, line 65-

Art Unit: 1771

col. 3, line 21). The foam particles are mixed with a liquid polyurethane binder, consolidated under pressure, and cured to bond the foam particles together (col. 1, line 62-col. 2, line 3). The binder is present in the range of 10-40% by weight (col. 5, lines 61-67) and may contain additives such as a catalysts, fire retardants, viscosity modifiers, and heat and light stabilizers (col. 4, lines 61-65).

Thus, it would have been obvious to one skilled in the art to substitute a rebond foam layer, as taught by DE SIMONE, for the foam layer of HIGGINS. Motivation to do so would be the advantages of said rebond foam, such as good cushioning properties at low cost (i.e., recycled material).

With respect to the open cell foam limitations of claims 128 and 129, it is argued that said limitations are obvious over the prior art even though said prior art does not explicitly teach open cell foams. Specifically, it would have been obvious for one skilled in the art to choose an open cell foam for the rebond foam of DE SIMONE since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use. *In re Leshin*, 125 USPQ 416. Therefore, said claims are rejected as being obvious over the cited prior art.

8. Claims 3, 8, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over the cited HIGGINS and DE SIMONE patents as set forth above, and in further view of EP 048 986 issued to DOW.

HIGGINS is silent about the face weight of the primary carpet base. However, the presently claimed face weight of 12-60 oz/yd² is well known in the art. For example, DOW '986 teaches a polyurethane foam backed carpet having a nylon pile face weight of 14 oz/yd² (page

Art Unit: 1771

11, lines 22-30). Thus, it would have been obvious to one skilled in the art to employ a face weight according to DOW in the carpet of HIGGINS, with the expectation of producing a suitable carpet face. Therefore, claims 3, 8, and 15 are obvious over the prior art.

9. Claims 36, 37, 51, 81-85, and 118 are rejected under 35 U.S.C. 103(a) as being unpatentable over the cited HIGGINS '857 and DE SIMONE patents as set forth above, and in further view of US 5,540,968 issued to HIGGINS.

HIGGINS '857 and DE SIMONE do not teach a nonwoven backing material adhered to the foam cushion. However, said backings are well known as evidenced by HIGGINS '968. The backing is a stabilizing needlepunched nonwoven material of polyester and polypropylene fibers (col. 2, lines 40-44). The nonwoven backing is applied to the carpet substrate via a polymeric adhesive (i.e., polyurethane forming composition). Additionally, HIGGINS '968 teaches an alternate embodiment of an adhesive quick release backing (col. 6, lines 55-64). Thus, it would have been obvious to one skilled in the art to add a nonwoven backing material, as taught by HIGGINS '968, to the carpet produced by the combination of HIGGINS '857 and DE SIMONE. Motivation to do so would be to enhance the dimensional stability of said carpet. Therefore, claims 37, 51, 81-85, and 118 are obvious over the prior art.

With respect to claim 36, it is noted that HIGGINS '857 and DE SIMONE do not teach a nonwoven primary backing. However said backings are well known in the art. For example, HIGGINS '968 teaches a nonwoven primary backing as an alternate to the woven primary backing (col. 3, lines 40-49). Thus, it would have been obvious to substitute a nonwoven primary backing for the woven primary backing of HIGGINS '857 since selection of any art recognized equivalent would be within the level or ordinary skill in the art. Therefore, claim 36

Art Unit: 1771

is obvious over the prior art.

10. Claims 9-13, 61, 68, and 74 are rejected under 35 U.S.C. 103(a) as being unpatentable over the cited HIGGINS and DE SIMONE patents as set forth above, and in further view of US 5,616,200 issued to HAMILTON.

HIGGINS '857 and DE SIMONE are silent with respect to the use of bitumen layer an adhesive layer of a carpet tile. However, said use is well-known in the art. For example, HAMILTON teaches adhesive layers may include vinyl resins, thermoplastic hot melts, bitumen, or modified bitumen (col. 4, lines 30-34). Thus, it would have been obvious to substitute a bitumen backing for the backing of HIGGINS '857 since selection of any art recognized equivalent would be within the level of ordinary skill in the art. Therefore, claims 9-13, 61, 68, and 74 are obvious over the prior art.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Cheryl Juska whose telephone number is 703-305-4472. The Examiner can normally be reached on Monday-Friday 10am-6pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

cj
December 31, 2002


CHERYL A. JUSKA
PRIMARY EXAMINER